

POU920000200US1

09/801,407

REMARKS

## TELEPHONE INTERVIEW:

The examiner kindly granted a telephone interview for July 12, 2005 at 2:00. At that interview, the applicant described the general goal of the invention which was to provide operating systems of a partitioned computer system with the ability to provide real time performance information to a workload manager when the operating system does not have a compatible workload manager component. This is accomplished by providing a resource control parameter velocity metric from the operating system that is derived from real time network packet throughput information as a function of real time partition resource utilization information. The velocity metric is provided to a workload manager or to a user display for monitoring the partitions activity.

The applicant explained to the examiner that the citations made by the examiner were missing key elements of the invention including a lack of any contemplation of using throughput information from a partition in calculating a velocity metric much less the throughput information in combination with resource utilization in the calculation.

The applicant agreed to review the support in the specification for language of claims 62, 63, 65 and 66 and edit accordingly. The examiner indicated that his supervisor was unavailable to discuss the allowability of the application and the applicant told the examiner that he would respond to the office action without waiting for the supervisor to be available. The applicant respectfully thanks the examiner for his thoughtful help.

## REMARKS:

In paragraph 3 of the office action, the examiner objects to claim 106 for depending on canceled claim 9. The applicant has

POU920000200US1

09/801,407

amended claim 106 to properly depend on claim 105. The applicant submits that amended claim 106 is in condition for allowance, which allowance is respectfully requested.

The applicant has canceled claim 62 without prejudice.

The applicant has amended claim 63 to relate the throughput information to the specification page 30 lines 11-12 and FIG. 14.

The applicant notes that support for claim 65 is found in the original specification claim 7 and in FIG. 14, wherein the 0.5 value of 1405 is half the maximum (1).

The applicant has amended claim 66 support for the amendment can be found in the specification in page 28 lines 24-27.

In paragraph 4, the examiner rejects claim 58 under 35 U.S.C. 112 for antecedent basis deficiencies. Claim 58 has been canceled without prejudice.

In paragraph 5, the examiner rejects claim 58-115 under 35 U.S.C. 103(a) over US 2002/0129127 A1 (Romero) in view of US 6,301,616 (Pal). The applicant has canceled claim 58 without prejudice.

In paragraph 9, the examiner rejects claim 59 "for similar reasons as stated in his rejection of claim 58". The applicant fails to understand from the office action, what cited reference provides each of:

the element a) particularly of "obtaining throughput information"; and

the element c) particularly of "using the resource utilization information obtained and the throughput information obtained" in a calculation of a resource control parameter. The applicant respectfully requests that the examiner provide specific citations of these elements and motivation for combining to create the present invention.

The examiner states "However, Official Notice is taken that both the concept and advantages of providing that real-time

POU920000200US1

09/801,407

performance information ... is expected in the art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include real-time performance information to the existing performance information because it would increase accuracy and be most up to date". The applicant disagrees. According to \*MPEP 2144.03c the examiner must provide evidence of providing real-time performance information comprising throughput related to resource utilization. While real-time performance information is known, realtime performance of throughput related to resource utilization is new.

The use of packet throughput information in combination with resource utilization in calculating a velocity metric is novel over the references cited. Furthermore providing the velocity metric to a program agent is novel. Therefore, claim 59 is allowable, which allowance is respectfully requested.

In paragraph 11, the examiner states that "as to claim 61, Romero teaches the user agent displaying at a terminal, the resource control parameter wherein the resource control parameter comprises the throughput information as a function of resource utilization ([0033])". The applicant disagrees. Romero is silent on throughput information as a function of resource utilization much less obtaining it from another partition and displaying it. Therefore, claim 61 is allowable, which allowance is respectfully requested.

In paragraph 13 the examiner states that "as to claim 63, Romero teaches the user agent displaying at a terminal, the resource control parameter comprising shifted throughput information as a function of resource utilization, wherein the shifted throughput information is derived from the throughput information obtained ([0033])". The applicant disagrees. The applicant has amended the claim to replace the element of "shifted throughput information" with "curve fitted throughput

POU920000200US1

09/801,407

information to make it easier to relate the claim to the specification. Romero does not anticipate any throughput information or curve fitted throughput information derived from throughput information much less displaying any throughput information as a function of resource utilization. Therefore, amended claim 63 is allowable, which allowance is respectfully requested.

In paragraph 14 the examiner states that "as to claim 64, ... It would have been obvious to one of ordinary skill in the art at the time of the invention was made to include the feature of the resource control parameter is displayed at a terminal as change in throughput divided by the change in resource utilization versus resource utilization". The applicant disagrees. The citations presented by the examiner are silent on displaying change in throughput much less displaying change in throughput divided by the change in resource utilization versus resource utilization. This is a novel combination of parameters displaying advantageous relationship between resource utilization and throughput that would not be obvious to one of average skill in the art. According to \*MPEP 2144.03c the examiner must provide a citation demonstrating an example of prior resource parameter displayed comprising change in throughput divided by change in resource utilization versus resource utilization. Therefore, claim 64 is allowable, which allowance is respectfully requested.

In paragraph 15, the examiner states that "as to claim 65, Romero fails to teach the user agent displaying at a terminal a mark, the mark indicating the utilization at which the effective utilization is half of it's maximum. However, it would have been obvious to one of ordinary skill in the art to include the feature that the display of effective utilization is marked at the utilization at which the resource control parameter is half of its maximum because it is the medium point of its

POU920000200US1

09/801,407

utilization". The applicant disagrees. Claim 65 is dependent on allowable claim 64 and is therefore allowable. Furthermore, the examiner has not cited any reference that would show that such a mark is known much less obvious. Furthermore, the mark is applied to the displayed change in throughput divided by the change in resource utilization versus resource utilization which itself is novel. According to According to \*MPEP 2144.03c the examiner must provide a citation demonstrating an example of prior resource parameter displayed comprising change in throughput divided by change in resource utilization versus resource utilization displayed with a mark indicating a half maximum point of resource utilization. Therefore, claim 65 is allowable, which allowance is respectfully requested.

In paragraph 19, the examiner states that "as to claim 69, Pal teaches providing the throughput information and the resource utilization information for the calculating step by way of a shared portion of memory, the shared portion of memory programmably accessible to both partitions, the shared memory for transferring information between the computer system first partition and the computer system second partition (see Abstract, e.g.)". The applicant disagrees. The Abstract citation is silent on "shared memory" much less "shared memory programmably accessible to both partitions". The Pal abstract discusses a "directory structure containing allocation related information for all resources in the system". The abstract is silent on shared memory much less passing information of any sort between operating system partitions of a computer system by way of a shared memory. Therefore, claim 69 is allowable, which allowance is respectfully requested.

In paragraph 20, the examiner states that "as to claim 70, Romero teaches providing the throughput information and the resource utilization information for the calculating step using a single operation memory to memory transfer function ([0018])".

POU920000200US1

09/801,407

The applicant disagrees. The cited reference is silent on throughput information, transferring throughput information between partitions and any single operation memory to memory transfer function of the present invention. Therefore, claim 70 is allowable, which allowance is respectfully requested.

In paragraph 21, the examiner states that "as to claim 71, Romero teaches wherein the workload is managed by modifying resources allocated to the first partition ([0007])". The applicant disagrees. The cited reference alludes to "program code for determining a configuration (e.g. The allocation of resources) for each partition" but does not discuss in any way modifying resources allocated. Furthermore, the cited references alone or in combination do not provide for modifying resources allocated based on a resource control parameter or a resource control parameter calculated using throughput information and resource utilization obtained from a partition. Therefore, claim 70 is allowable, which allowance is respectfully requested.

In paragraph 25, the examiner states that "as to claim 75, Romero teaches wherein the workload is managed dynamically ([0005],[0006])". The applicant disagrees. Romero does not contemplate managing a workload based on the resource control parameter of the present invention much less managing it dynamically. Therefore, claim 75 is allowable, which allowance is respectfully requested.

In paragraph 26, the examiner states that "as to claim 76, Romero in view of Pal fails to explicitly teach wherein the throughput information comprises network packet counts. However, it is well known in the art that throughput information are network packet counts. It would have been obvious ... to have the feature of throughput information being network packet counts because this is a measure of how much information has been transmitted over a network (throughput) and it is needed for

POU920000200US1

09/801,407

calculations involving resource allocation". The applicant disagrees. Using throughput in combination with resource utilization to create a velocity vector is a key element of the present invention. There has been no art cited by the examiner that provides this feature. It has not been demonstrated in any way by the examiner that "how much information has been transmitted over a network (throughput) is needed for calculations involving resource allocation" as he alleges. Therefore, claim 76 is allowable, which allowance is respectfully requested.

Furthermore, claims 60-76 depend on allowable claim 59 and are therefore allowable, which allowance is respectfully requested.

Claims 77-115 comprise the same limitations of allowable claims 59-76 and are therefore allowable, which allowance is respectfully requested.

New claims 116-121 incorporate limitations of previously presented claims, furthermore claims 116-121 depend on allowable claims and are therefore allowable, which allowance is respectfully requested.

\*MPEP 2144.03c states in part: "If Applicant Challenges a Factual Assertion as Not Properly Officially Noticed or not Properly Based Upon Common Knowledge, the Examiner Must Support the Finding With Adequate Evidence".

In paragraph 32, the examiner states that "pending claims must be 'given their broadest reasonable interpretation consistent with the specification'." The applicant respectfully submits that according to MPEP 2143.03: All Claim Limitations Must Be Taught or Suggested.

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*,

POU920000200US1

09/801,407

424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)".

In paragraph 33 the examiner responds to the applicants arguments. However, the applicants arguments were directed to former claim 1 but the examiners response is directed to claim 58. The examiner further states that certain limitations are not given patentable weight because they are in the preamble of the claim (1). The applicant has provided new claims 58 and 59-115 and therefore which do not have the elements of the claim in the preamble as was the case for claim (1).

It is respectfully submitted that the application is now in condition for allowance, which allowance is respectfully requested.

RESPECTFULLY SUBMITTED

BY: 

JOHN E. CAMPBELL-AGENT

Registration No. 52,687

Phone: 845-433-1156

Fax: 845-432-9786